

June 9, 1975

Professor Freeman J. Dyson
Institute for Advanced Study
Princeton University
Princeton, New Jersey 08540

Dear Professor Dyson,

I read with great interest your article entitled "The Hidden cost of saying No!" in the June issue of the Bulletin of Atomic Scientists. Actually, I had received the text of your talk in Madrid from mutual friends, Dan and Maxine Singer, and thought then that it would be worthwhile writing to you to clarify some misconceptions. Now seems a good time to do that.

I agree completely with your view that the price we pay for not doing something should be considered carefully during the decision process. The example you cited about drug research is a persuasive argument but the one citing the "Berg statement" was, I believe, based on inadequate and misinformation. I'd like to take this opportunity to say why.

First of all, the letter we published in Science called for a temporary and voluntary deferral of two specific types of experiments. We did not, as was reported in some places, call for a ban on genetic research; nor did we object to this line of investigation on moral or ethical grounds, i.e., because it would be opening the door to God knows what! We foresaw the possibility that in the excitement and eagerness to apply this new and very simple methodology to a variety of fundamental questions, many investigators would not consider the potential risks inherent in their experiments. To prevent that my colleagues and I felt it would be useful for the scientists who were already using or who were about to use these techniques to meet, discuss the possible risks and devise guidelines that would prevent the unwanted consequences; hence the Asilomar Conference. Rest assured none of the signers of the letter calling for the pause were opposed to carrying on this research-in fact most of us were committed to such an experimental approach-but each of us felt strongly about the need to find a way to do it safely. If one of the early pioneer radiologists had recognized the hazards of excessive exposure to x-rays, and had warned his colleagues throughout the world about the danger to themselves and their patients, measures would have been taken to reduce the risks from that exposure. I doubt that that would have seriously affected progress in the application of radiologic methods to diagnosis or therapy. Similarly the establishment of guidelines and

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facilities for working with potentially dangerous radioactive chemicals has not seriously stopped research nor reduced the benefits from experimentation with such isotopes. I believe that a go slow policy now will provide the opportunity to consider appropriate measures to reduce or eliminate the risks; and, I suspect, we will then move further and more assuredly along the promising paths this research portends.

One more point deserves comment. You said that you were left with a feeling of dissatisfaction because the statement was written as if the cost of saying no (in this case we advocated wait and not No) was ignored. I wonder if you got that impression from having read the wrong version (the version published in Nature, July 19, 1974). I enclose a copy of the letter as it appeared in Science (July 20, 1974) and PNAS (July 1974) so that you may read the last paragraph and judge whether we fully realized that observance of suggestions might entail postponement or possibly abandonment of certain experiments.

You also expressed what you thought would be the most useful outcome of the Asilomar Conference. I enclose a copy of the Summary Statement agreed to by the Conference participants and I leave it to you to determine whether your hopes were fulfilled.

Sincerely yours,

PB:af
Enclosures